

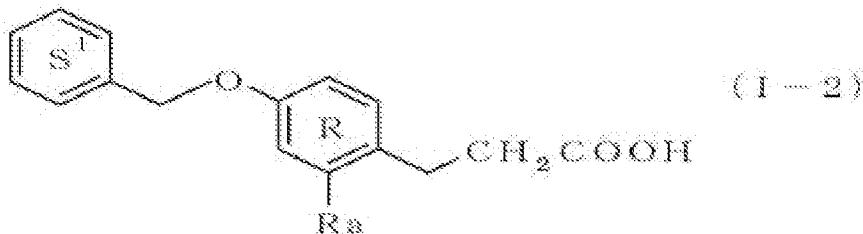
DETAILED ACTION

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

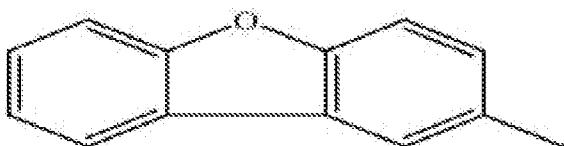
Authorization for this examiner's amendment was given in a telephone interview with Mark Russett on 01/14/2011.

This application has been amended as follows:

13. A compound represented by the formula

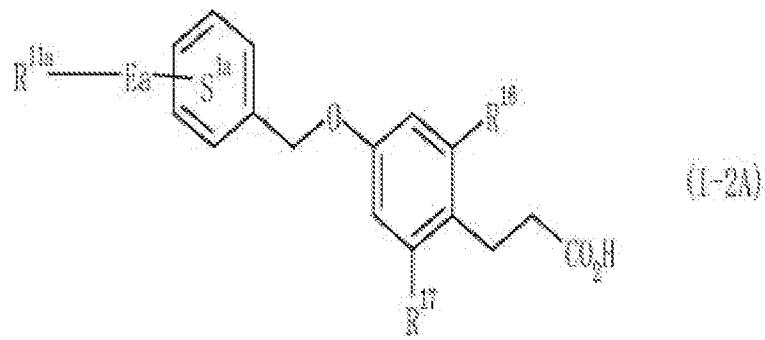


wherein ring S1 is a benzene ring having a substituent represented by the formula: R¹¹-E²- , wherein R¹¹ is a phenyl group, an indanyl group or a naphthyl group, each optionally having substituent(s), and E² is a bond or a spacer, and the spacer represented by -(CH₂)^{m1}-W¹-(CH₂)^{m2} -(CH₂)^{m1}-W¹-(CH₂)^{m2} - wherein m¹ and m² are each an integer of 0 to 3, W¹ is -O-, -N(R²)-, -S-, -CO- or - CO-N(R³)-, and R² and R³ are each a hydrogen atom or a C₁₋₆ alkyl group-), or R¹¹ optionally forms, together with E² and ring S¹,



, and ring S¹ optionally ~~further~~ has additional substituent(s) in addition to R¹¹-E²-, said additional substituent(s) selected from the group consisting of an optionally substituted C₁₋₆ alkyl group, an optionally substituted C₁₋₆ alkoxy group, a halogen atom and a C₇₋₁₆ aralkyloxy group; ring R is a phenylene group optionally ~~further~~ having substituent(s) selected from the group consisting of a C₁₋₆ alkyl group, a halogen atom, a C₁₋₆ alkoxy group and a hydroxy group; and Ra is a hydrogen atom, a halogen atom, a C₁₋₆ alkyl group or a C₁₋₆ alkoxy group or a salt thereof.

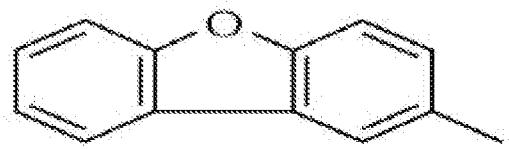
16. A compound represented by the formula



wherein R^{11a} is a phenyl group having 1 or 2 substituents, Ea is a bond, an oxygen atom or an optionally substituted methylene, ring S¹ is a benzene ring optionally ~~further~~ having substituent(s) selected from an optionally substituted C₁₋₆ alkyl group, an optionally substituted C₁₋₆ alkoxy group and a halogen atom, and R¹⁶ and R¹⁷ are the same or different and each is a hydrogen atom, a halogen atom, a C₁₋₆ alkyl group or a C₁₋₆ alkoxy group; or a salt thereof.

22. The compound or salt of claim 13, wherein ring S¹ optionally ~~further~~ has a C₁₋₆ alkyl group, where the optional substituent of ring S¹ is a C₁₋₆ alkyl group.

23. The compound or salt of claim 13, wherein R¹¹ is a phenyl group or an indanyl group, each optionally having substituent(s) selected from the group consisting of a halogen atom, a nitro, a carboxy, an optionally halogenated C₁₋₆ alkyl, a hydroxy- C₁₋₆ alkyl, a carboxy- C₁₋₆ alkyl-carbonylamino- C₁₋₆ alkyl, an optionally halogenated C₁₋₆ alkoxy, a C₆₋₁₄ aryl, a C₆₋₁₄ aryloxy and a C₇₋₁₆ aralkyloxy, E² is a bond, -0-, -CH₂-O-, -CO-, -CONH-, -N(CH₃)CH₂-, -S-CH₂- or -C=C-, ring S¹ optionally ~~further~~ has an additional substituent a C₁₋₆ alkyl group, or R¹¹ ~~optionally~~ forms, together with E² and ring S¹,

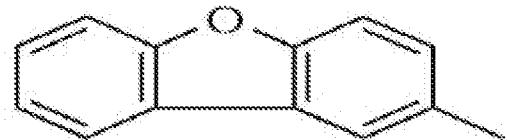


, ring R is a phenylene group optionally further having a C₁₋₆ alkyl group, and R_a is a hydrogen atom.

35. A method of regulating a GPR40 receptor function, which comprises administering an effective amount of the compound or salt of claim 13 or 16 to a mammal.

39. The compound or salt of claim 13, wherein R¹¹ is a phenyl group or an indanyl group, each optionally having substituent(s) selected from the group consisting of a halogen atom, a nitro, a carboxy, an optionally halogenated C₁₋₆ alkyl, a hydroxy- C₁₋₆ alkyl, a carboxy- C₁₋₆ alkyl-carbonylamino- C₁₋₆ alkyl, an optionally halogenated C₁₋₆ alkoxy, a C₆₋₁₄ aryl, a C₆₋₁₄ aryloxy and

a C₇₋₁₆ aralkyloxy; E² is a bond, -O-, or -CH₂-O; ring S¹ optionally further has a C₁₋₆ alkyl group; or R¹¹ optionally forms, together with E² and ring S¹,



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Ring R is a phenylene group optionally having a C₁₋₆ alkyl group; and R_a is a hydrogen atom.

Claims 35 is rejoined. Claims 13, 16-23, 34, 35 and 39 are allowed. Claims 37 and 38 (canceled)

2 The following is an examiner's statement of reasons for allowance: The core structure of the compound of the formula (I) is taught by the prior art (WO2002053547). However substituents for R11-E2 where R11 is a phenyl group, an indanyl group or a naphthyl group and E2 is a spacer or a bond is not taught by the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN CORNET whose telephone number is (571)270-7669. The examiner can normally be reached on Monday-Thursday 7.00am-5.30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brandon Fetterolf can be reached on 571-272-2919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JC/

/Timothy P Thomas/

Primary Examiner, Art Unit 1628